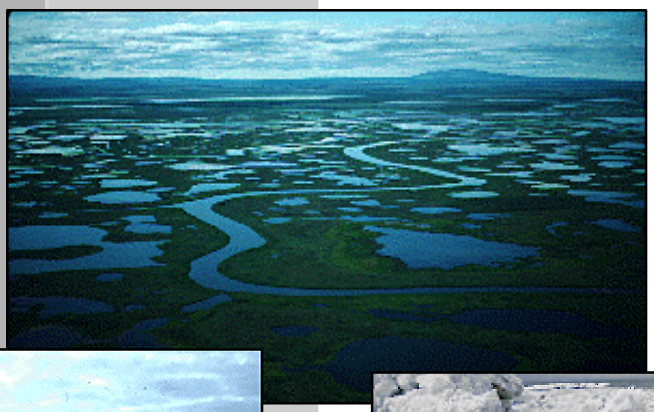
Building the Future…

THE BERING STRAIT OVERALL ECONOMIC DEVELOPMENT PLAN



Photos from (L to R) UAF Reindeer Herding Program & National Park Service

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Preface

I am proud to say that the Bering Strait Overall Economic Development Program (OEDP) was not conceived in an office or a laboratory by a small group of economists, PhDs, politicians, or salesmen. Kawerak's ARDOR Committee is proud to present an OEDP based on critical economic issues, local needs assessment lists, and action plans developed in cooperation with over 400 participants throughout the Region. This OEDP is a grassroots effort by the residents of the Bering Strait Region to determine their own needs and direction for economic development...as communities and as people. This document was derived by "Community-Led Rural Economic Development Workshops" held in 16 communities and was open to everyone and anyone interested in participating. Local economic priorities were determined by the residents of each village, and regional economic strategies were based on information obtained from each Local Economic Development Plan (LEDP). My sincere thanks to everyone who made this OEDP possible, especially to the residents of our communities who shared their valuable time, thoughts, and ideas. I encourage you not to be frustrated with the planning process, but to embrace this document and continue to work toward implementing your ideas and plans. Our youth expect it, and our elders deserve it! Once again, Quyannaq-pak…I present to you the 5 year Overall Economic Development Plan…may it never collect dust.

- Karlin J. Itchoak, Economic Development Planner
  Bering Strait ARDOR Committee/Kawerak, Inc.

Acknowledgements

PROJECT SPONSORS:

Alaska Department of Community and Regional Affairs (DCRA)
Bering Strait Alaska Regional Development Organization (ARDOR)
Kawerak, Incorporated
US Department of Agriculture (USDA)
US Department of Commerce Economic Development Administration (EDA)

PROJECT PARTICIPANTS:

Brevig Mission	Gambell	Mary's Igloo	Shaktoolik	Teller
Council	Golovin	Nome	Shishmaref	Unalakleet
Elim	King Island	Saint Michael	Solomon	Wales
Diomede	Koyuk	Savoonga	Stebbins	White Mountain

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Tom Sparks	Seat C: Minerals	Nome
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Table of Contents

Table of Charts & Figures

Introduction

What is ARDOR?

In 1989, the Alaska State Legislature authorized the creation of Alaska Regional Development Organizations (ARDORs) – entities responsible for addressing economic concerns within their respective regions. On January 15, 1997, Kawerak's Bering Strait ARDOR Committee was formed and represents economic interests in fisheries, banking, tourism, mining, and transportation, and reserves 5 seats for village elected officials who serve as Kawerak Board Members. The Region's ARDOR Committee is responsible for preparing an economic profile of the Region and its communities, as well as creating and overseeing the implementation of an Overall Economic Development Plan (OEDP).

What is an OEDP?

An Overall Economic Development Plan analyzes local conditions, identifies problems and opportunities, sets goals, designs strategies to achieve these goals, coordinates activities to implement the strategies, and evaluates accomplishments. The vision of the OEDP is to create employment opportunities, foster a more stable and diversified economy, improve local conditions, and provide a mechanism for guiding and coordinating the efforts of individuals and organizations concerned with economic development in this Region. To achieve this vision, the mission for our Overall Economic Development Plan is to:

- Foster a more stable and diversified economy
- Create and sustain employment opportunities
- Strengthen the skills and qualifications of our workforce
- Improve living conditions throughout the Region

The Bering Strait Region has one of the highest unemployment and poverty rates in Alaska, and several non-profit, state and federal agencies are currently attempting to alleviate economic distress in the Region. By developing an Overall Economic Development Plan, the Bering Strait Region possesses a tool that identifies community needs and provides development strategies. An Overall Economic Development Plant facilitates a consolidated effort to implement economic development strategies that will subsequently decrease unemployment and welfare dependency. Without a regional OEDP, a duplication of efforts occurs in various projects and programs, and hinders the ability to improve the economic and social well-being of our residents.

How was the OEDP Developed?

To create an Overall Economic Development Plan, Kawerak staff adhered to US Department of Commerce's "Guide for Area Overall Economic Development Program," as well as the USDA Rural Development's "A Guide to Strategic Planning for Rural Communities." Both publications emphasized grassroot involvement to assess and maximize local resources, and provided outlines for creating a strategic plan. Kawerak's Community and Economic Development (CED) staff began the process by incorporating previous strategies and studies into the plan, then facilitated planning workshops with representatives from 16 different communities throughout the

Region. Representatives from native corporations, tribal and city councils, local businesses, and interested residents identified community strengths, concerns, goals, and specific projects associated with economic development.

Photos of Community-Led Economic Development Workshops

Brevig Mission

Gambell

Council

Golovin

Elim

King Island

Saint Michael

Koyuk

Shaktoolik

Nome

Shishmaref

Solomon

Teller & Mary's Igloo

Stebbins

Wales

The result from these meetings is a consolidated record of economic needs and activities for our Region. The Bering Strait OEDP analyzes local conditions; identifies problems and opportunities; sets goals; designs strategies to achieve these goals; coordinates activities to implement the strategies; and evaluates our accomplishments. Because our residents developed it, this document truly represents how we will improve our economy.

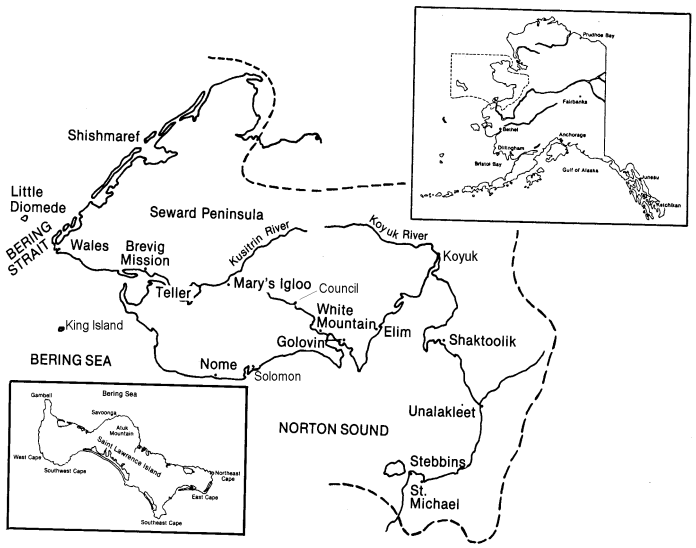
Where is the Bering Strait Region?

Geographic Description

Located in northwest Alaska, the Bering Strait Region (also referred to as the Seward Peninsula, the Norton Sound District, western Alaska, or the Nome area) is found between latitudes 63º 30' and 66º 30', south of the Arctic Circle. The area contains 570 miles of coastline that includes all of Norton Sound, and portions of the Bering Sea and Arctic Ocean. The regional boundaries extend 230 miles east to west and 230 miles north to south and encompass an area of more than 22,000 square miles, (US Department of Agriculture Date Unknown) and is roughly the size of Virginia. (Nome Convention & Visitors Bureau 1997) The Region extends from the village of

Shishmaref on the northern shore of the Seward Peninsula to Stebbins on the southern coast of the Norton Sound, and includes villages on St. Lawrence Island, King Island, and Little Diomede.

The Bering Strait Region of Alaska



Source: Overall Economic Development Committee for the Bering Straits Region

The geography of the Region is varied, ranging from gently slopes rising 1,000 to 2,000 feet to highland areas with steep ridges of about 4,000 feet. Interior areas contain marshy plains while coastal areas are dotted with lakes, and in northern areas of the Seward Peninsula, lagoons. Although the peninsula is completely unglaciated, it is underlain with permafrost. The Region's climate is transitional, fluctuating between maritime when the water is ice free to continental in the winter. Summer temperatures normally range from 30 degrees to 50 degrees Fahrenheit and normal winter temperatures from 5 degrees to 10 degrees Fahrenheit. Snowfall ranges from 33 to 80 inches, with accumulation highly variable because of drifting caused by winds which average 10 to 15 knots year-round.

Who Owns the Land in our Region?

Primary Land owners in this Region include the federal and state governments, Native corporations and Alaska Native tribes (conveyed through the 1971 Alaska Native Claims Settlement Act [ANCSA]), and individual Native allotments (through the 1906 Allotment Act and the 1926 Township Act). In 1971, the Alaska Native Claims Settlement Act altered ownership and control of land once held by Alaska's indigenous people under aboriginal title. Under provisions of the Act, village corporations were formed and received surface rights to all lands in their specified townships (additional allocated lands were based on village populations). Regional corporations, meanwhile, received subsurface rights to village corporation lands. The village corporations of Elim, Gambell and Savoonga opted to take fee simple title to surface and subsurface lands amounting to 316,000 acres for Elim and 1.2 million acres for Savoonga and Gambell, and were excluded from land claim monies.

Section 17(d)(2) of the Act also authorized the Secretary of the Interior to reserve 80 million acres for possible inclusion in units of the National Park System, National Wildlife Refuge System, National Forest System, or National Wild and Scenic Rivers System. In the northern section of the Bering Strait Region, the National Park Service created the Bering Land Bridge Preserve. The 1980 Alaska National Interest Lands Conservation Act (ANILCA) established Conservation System Units (CSU) throughout Alaska, including areas within the Bering Strait Region. The CSU's in the Bering Strait Region include National Wildlife Refuge and National Park Systems and Public Lands under the Bureau of Land Management (BLM).

Socioeconomic Data

1996 Population in the Nome Census Area

Located in one of the most remote parts of the world, the Bering Strait Region is home to over 9,000 people, most of who have ancestral ties to the area dating back thousands of years. The Region lies at the heart of a continental crossroads that has profoundly influenced life in the Northern Hemisphere. Native people have lived in the Region for at least 10,000 years, sustained by the area's rich mosaic of arctic and sub-arctic animals and plants.

In 1996, community populations varied from approximately 3,500 in Nome (52% Alaska Native), to 161-798 persons in surrounding villages (at least 90% Alaska Native). Approximately 1/3 of the Region's population resided in Nome, the area's largest community and commercial hub. The second, third and fourth largest communities are Unalakleet (798), Gambell (636), and Savoonga (615) respectively (Alaska Department of Community and Regional Affairs 1990). As of 1990, the median age in the Region was only 26 years; 38% of the Region's population was less than 18 years old, and only 5% of the population was greater than 65 years old (US Department of Education National Center for Educational Statistics, and The MESA Group 1990).

1996 Population of the Bering Strait Region by Community

Brevig Mission	261	Mary's Igloo *	0	Stebbins	507
Council *	0	Nome	3,511	Teller	278
Elim	284	Port Clarence	19	Unalakleet	798
Gambell	636	Saint Michael	329	Wales	165
Golovin	161	Savoonga	615	White Mountain	212
Diomede	172	Shaktoolik	231	Other	89
King Island *	0	Shishmaref	537		
Koyuk	280	Solomon *	0	**TOTAL**	**9,085**

Data Source: Alaska Department of Community and Regional Affairs

** Communities marked with an asterisk are occupied during the summer and fall months for camping and subsistence purposes, and are generally not populated year round.*

Although persons 65 years and older only comprise approximately 5% (419) of the regional population in 1990, nearly 16% (65) of this population segment lived below the poverty level. (US Census Bureau 1990) Because many of these individuals are unable to work, they cannot afford basic living necessities, and are exposed to costly health risks. Additionally, even though elders often

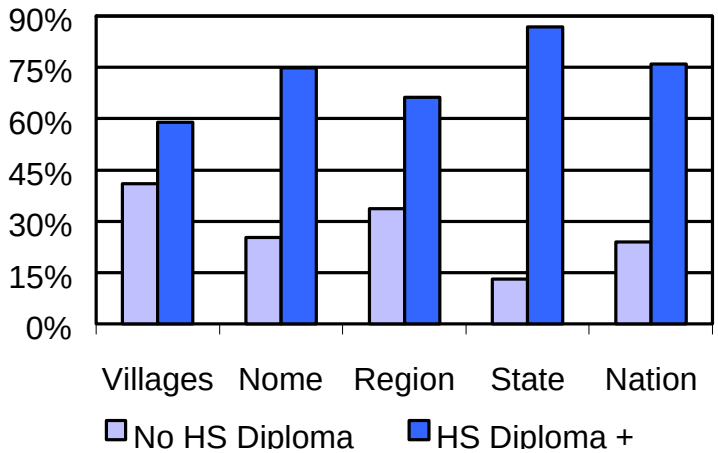
live with extended families, some live alone. Facilities that provide a safe and healthy environment for the elderly should be available in this Region.

Educational Attainment Levels

School enrollment rates throughout the Region steadily increased from 2,085 in 1990 to 2,508 in 1998, most of which occurred in communities other than Nome. While Nome Public Schools increased by 30 students, enrollment in the Bering Strait School District increased by nearly 400 students. (Windisch-Cole 1998) Despite increasing enrollment rates, high school education attainment for the Bering Strait Region in 1990 lagged behind both the state and national averages.

Nearly 34% of the Region's population who are 20 years and older do not have high school diplomas. The highest percentage of persons 20 years and older without high school diplomas are village residents (41%). (NCES & MESA 1990) This may be attributed to the fact that older segments of the population were too old to attend public schools when they were established in the villages during the 1960s-1970s. Nearly 87% of the state's population 20 years and older have high school degrees or higher, whereas only 66% of the Region's population have a high school education or more. (Ibid.)

1990 Education Attainment Levels of Persons 20 Years and Older by Area

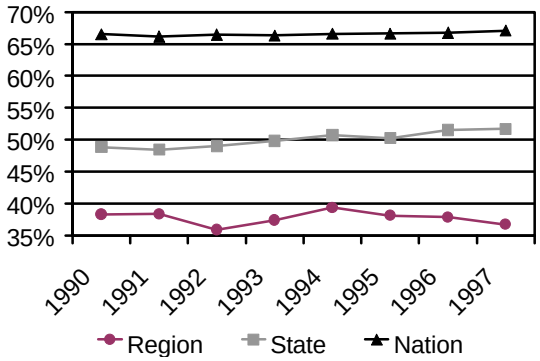


Data Source: "School District Data Book," USDOE National Center for Educational Statistics, and The MESA Group

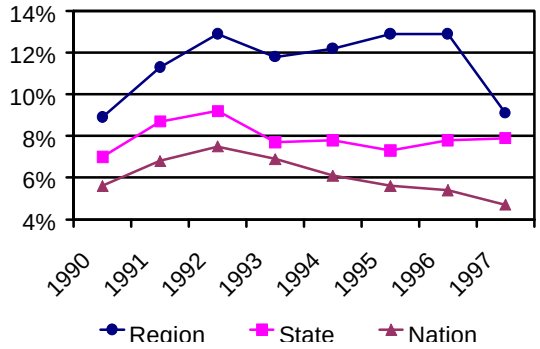
Efforts to improve post-secondary education levels must be made to enhance human resources in the Norton Sound area. In order to enhance the economic power of older adults living in the village, opportunities to attain a Graduate Equivalency Diploma (GED) and to attend job-training programs must be available. Increasing opportunities for Norton Sound residents to complete a 2-4 year college degree or a technical training program enhances economic earnings among households, and can result in long term economic growth for the Region.

Employment Rates

Percent of Population in Labor Force by Area



Unemployment Rates by Area



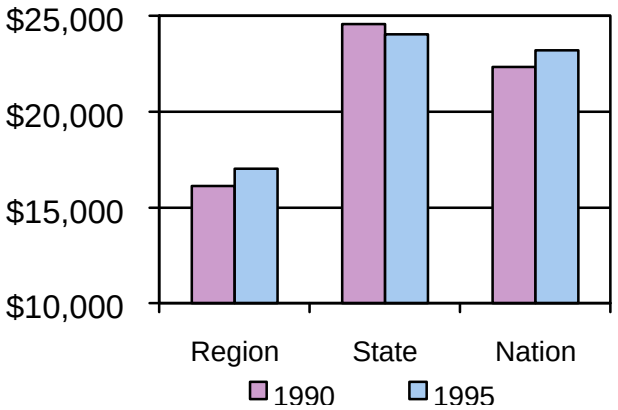
State and Regional Data: AKDOL Research & Analysis Section, National Data: US Bureau of Labor Statistics

Between 1990 and 1997, the percent of the state's and nation's populations in the labor force increased by 2.8% and .6% respectively, whereas labor force participation for the Bering Strait Region declined by 1.6%. In 1997, about 37% of the Region's population was in the labor force, approximately 15% less and 30% less than the state and national averages, respectively (Alaska Department of Labor & US Bureau of Labor Statistics). In 1997, 88.3% of the Region's labor force was employed; approximately 4% and 7% less than the state and national averages, respectively. (Ibid.) Despite the recent economic growth experienced in the nation, employment rates for the state of Alaska and the Bering Strait Region declined by 2.7% between 1990 and 1997.

Job opportunities in the Region's communities outside of Nome are extremely limited, and most village residents do not actively seek employment. As a result of the limited employment opportunities, many families engage in subsistence hunting and fishing practices to secure food, and are dependent on government transfers such as unemployment and welfare benefits, the Alaska Permanent Fund Dividend, and other public assistance programs.

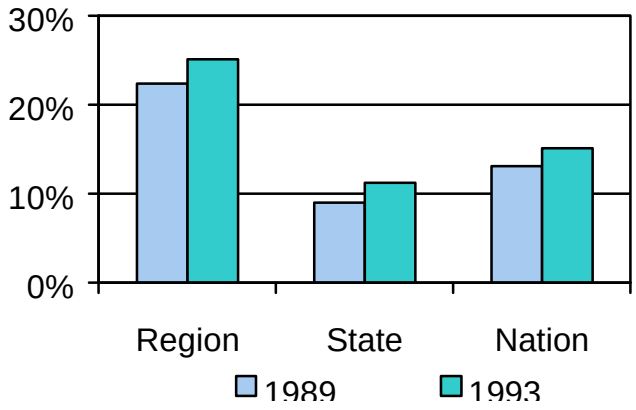
Income and Poverty Levels

1995 Income Per Capita by Area



Source: USDOC Bureau of Economic Analysis

1990 Percent of Population in Poverty by Area



Source: US Census Bureau

Between 1990 and 1995, per capita income for the Bering Strait Region grew faster than state and national averages. Despite this growth, however, regional income per capita in 1995 ($17,034) was approximately $6,000 less than the national average ($23,196) and $7,000 less than the state average ($24,046). (US Bureau of Economic Analysis 1997)

Because the Bering Strait Region has the lowest per capita income levels compared to the state and nation, it also experiences the highest poverty rate. In 1993, approximately 25% of the Region's population lived in poverty, a figure that exceeds both state and national levels (US Bureau of the Census 1998). Even though the change in poverty for the Region was less than the state and nation between 1989 and 1993, the percent of the Region's population in poverty was 10% greater than the national average, and approximately 14% greater than the state average (Ibid.)

It is important to recognize that even though village residents substitute store bought products with harvested foods, the cost of living expenses in rural Alaska negate the effects subsistence practices would have on alleviating the effects of low per capita income and poverty. The necessary hunting and camping equipment to engage in subsistence activities in Alaska's villages is purchased at considerable cost. A comparison between urban and rural families with comparable income levels would probably reveal that even though a rural Alaskan family can substitute store bought goods with harvested foods, rural families must purchase costly equipment and gear in order to participate in subsistence activities. It is more than likely that items such as boats, outboard motors, All Terrain Vehicles, canvas tents, camping stoves and heavy outdoor clothing are not purchased by an urban family. Even if both families purchased similar items, the following table reveals that such equipment could cost at least 50% more in rural areas than in Alaska's largest city.

Cost of Living

Comparison of Cost of Living Expenses During the 4th Quarter of 1995
(1997 Prices for Nome and Stebbins adjusted to reflect 1995 dollars, coefficient = 1.05)

Cost of Living Expenses for One Week	Atlanta	Tacoma	Juneau	Anchorage	Nome	Stebbins
1 Pound Ground Beef	$ 1.79	$ 1.43	$ 1.43	$ 1.34	$ 2.57	$ 2.84
1/2 Gallon Whole Milk	$ 1.22	$ 1.55	$ 1.97	$ 2.19	$ 3.12	$ 4.13
1 Dozen Eggs	$ 0.87	$ 1.07	$ 0.99	$ 1.38	$ 2.17	$ 2.52
1 Pound Coffee	$ 3.11	$ 3.33	$ 3.57	$ 3.54	$ 5.71	$ 6.34
1 Gallon Gas	$ 0.93	$ 1.29	$ 1.29	$ 1.20	$ 1.83	$ 2.14
Men's Levis	$ 28.39	$ 31.39	$ 31.15	$ 32.99	$ 37.35	$ 27.15
Hospital Room	$ 319.00	$ 373.00	$ 400.00	$ 684.00	$ 878.32	$ 1,014.87
Doctor's Appointment*	$ 50.00	$ 55.40	$ 60.60	$ 79.80	$ 108.25	$ 244.80
TOTAL	**$ 405.31**	**$ 468.46**	**$ 501.00**	**$ 806.44**	**$ 1,039.32**	**$ 1,304.78**
Difference Between Location & Anchorage	-50%	-42%	-38%	0%	29%	62%
Difference Between Location & Atlanta	0%	16%	24%	99%	156%	222%

** Expenses for Nome and Stebbins do not include housing accommodations.*
Source: Alaska Department of Labor Research and Analysis Office & Kawerak Inc.

Unlike the lower 48, Alaska's urban locations such as Anchorage, Fairbanks and Juneau have lower cost of living expenses than the rural locations. Food costs tend to have three tiers in Alaska. The Alaska's urban areas have the lowest food costs, while smaller communities located on or near Alaska's rail belt or marine highway have slightly higher costs than the urban areas. The highest

food costs are found in isolated communities whose commodities are transported primarily by air. In Alaska's regional hubs such as Barrow, Bethel, Dillingham, Nome, and Kotzebue, food prices are 20% to 50% higher than prices in Anchorage, and food costs in villages surrounding regional hubs are higher still (AKDOL Research & Analysis Section 1997). Cost of living expenses in Nome is 29% more than costs in Anchorage, and 156% greater than cost of living expenses in Atlanta, Georgia. Meanwhile, cost of living expenses in the regional village of Stebbins is 62% greater than in Anchorage, and 222% than costs in Atlanta, Georgia. While having the lowest per capita earnings than the state average, the purchasing power of village residents is diminished by high cost of living expenses.

Cash and Subsistence Economy

A mixed economy based on cash and subsistence practices exists in the Bering Strait Region. The rural cash economy consists mainly of jobs created by federal, tribal, state and local government employment; mining and mineral companies; commercial fishing; Native Corporations; Norton Sound Health Corporation; construction work; reindeer herding; arts and crafts; local retail stores/services; and numerous temporary seasonal and part-time employment. Meanwhile, a subsistence economy exists year round and includes hunting and gathering of land and marine mammals; seafood; birds; and plant life. Variations and extensions of subsistence practices are processing foods, hides, and other animal parts or resources for consumption and utilization. Other examples include bartering, sharing, and selling harvested foods; carving, sewing, beading and basket making; and boat and sled building.

In the Bering Strait Region the need for cash is critical. Many people throughout the Norton Sound communities depend on both economies for their livelihood and survival. It is necessary for many residents to combine subsistence practices with a cash income in order to purchase hunting equipment such as tents, stoves, guns and ammunition, all terrain vehicles, boats and outboard motors. Additional items such as food, fuel, supplies, parts, and seasonal clothing contribute to the expenses necessary for participating in a mixed economy. Due to transportation costs associated with shipping these items to village locations, these expenses often equal or exceed the price of a new car or truck. However, dollars and cents can not measure the underlying importance of subsistence. Subsistence reaches far beyond hunting and gathering practices and encompasses an entire way of life passed on from generation to generation since time immemorial. Subsistence is vital to the livelihood of our Region's economy and is based on historical indigenous cultures and traditions, not monetary and material possessions. The subsistence lifestyle of our indigenous people continues to be critical to the socioeconomic well being of our Region. This unique arctic economy can not be accurately described nor understood in words alone, it must be lived...experienced.

Alaska Native Arts & Crafts

It is estimated that nearly two thousand Native people throughout the Region increase their annual income by producing arts and crafts. According to a needs assessment by the Alaska State Council of the Arts, 25% of the artists surveyed in Nome, and 7.1% of the respondents in Shishmaref earn their annual income through arts and crafts. Alaska Natives are the only people in the United States who are allowed to harvest marine mammals including walrus, seals, whale, and polar bear for subsistence purposes. They are also legally allowed to use raw materials from marine

mammals (such as walrus ivory, whale baleen, and seal pelts) for arts and crafts purposes. These products range from Ivory carvings, dolls, masks, grass baskets, dance fans, kayaks, and jewelry to clothing such as parkas, mukluks (boots), fur mittens, fur hats, and sealskin slippers.

Oftentimes the price paid for Alaska Native arts and crafts is not determined by artistic skill, but by the artist's ability to negotiate and travel where the market exists. An artist's work receives limited exposure due to remote geographic location of the Region's villages, and the high cost of transportation between villages and the existing market in urban areas. Most often, prospective buyers travel to villages in order to purchase handmade crafts, and resell these items at retail stores at significantly higher prices. Some artists do travel to Nome or other cities in order to sell such items to retail storeowners, on the street, or at exhibits and craft fairs in Alaska's urban areas. Due to the high costs associated with travel and accommodations, however, many artists in the rural villages cannot afford such trips, and are at a distinct disadvantage.

Physical Infrastructure

Transportation

Although Alaska's two largest cities are connected by road and rail, most of the state is not connected by surface transportation. (Alaska Housing Finance Corporation 1995) Unlike most areas in America, a road system does not exist throughout the Bering Strait Region. Nome is the only community in the Region with an extensive road system. The Teller Road, which leads to the Native village of Teller, is seventy-three miles northwest of Nome. The Council Road extends northeast seventy-two miles to the seasonal community of Council. The Kougarok Road (also referred to as Beam Road or Taylor Road) stretches eighty-five miles north to the Kougarok River Bridge. A spur road also leads to the old Pilgrim Orphanage, which is also the sight of the peninsula's most accessible Hot Springs. There are opportunities for observing rare species of birds, viewing wildlife and wildflowers.

With the exception of roads connecting Council, Nome, Solomon, Teller, and one between Stebbins and St. Michael, most communities do not have roads leading to other locations. As a result, most village residents do not own automobiles, nor do they possess operating licenses. Primary modes of land transportation include snowmobiles and All Terrain Vehicles (ATV's). Both summer and winter vehicles are essential to the livelihood of many rural families. In addition to transporting people, snowmobiles and ATVs are used to haul drinking water, wood (for heat & cooking), food and groceries, trash, and hazardous waste materials. They are also relied upon for subsistence activities such as hunting, trapping, and fishing, and for visiting & bartering with other communities.

Air transportation is the most common and reliable mode of transportation in the Bering Strait Region. The aviation system is the only dependable mode to all communities throughout the year. The primary source of air transportation throughout the Bering Strait villages is small single or twin engine commuter airplanes. While Alaska's population only accounts for 2% of the US population, Alaskans use 13% of all commuter airlines and air taxi trips in the US, and transport most commercial goods via airfreight. As a result, Alaskans use commuter airlines 65 times more

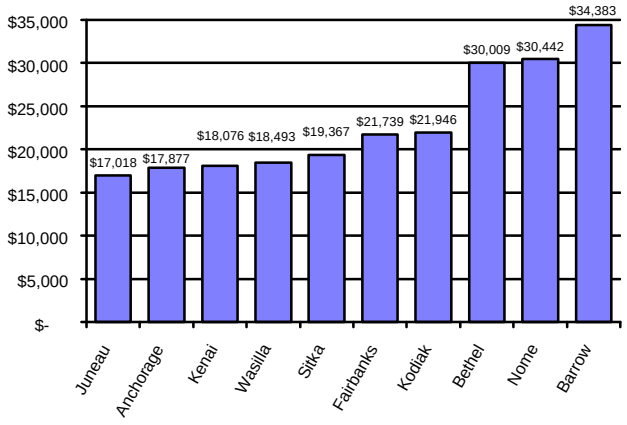
often than the average citizen does. (Alaska Department of Transportation and Public Facilities 1997)

A majority of the communities are located on or near the coast, and community residents utilize the rivers and coastline as vital routes for transportation during the summer months. In late May to early October, boats with outboard motors are used to travel to fish camps, whaling camps, and for hunting. Although marine freight to the Bering Straight Region is seasonal, it offers a good way to haul bulk goods and materials, and serves as an economical alternative to airfreight. After the ice breaks up in late May, marine freight services (mostly barges) visit coastal villages bringing important shipments of cargo such as gasoline & heating oil, canned & dry goods; and other basic supplies & staples. Construction materials and equipment; automobiles, boats, and snowmobiles; and fully assembled houses are also shipped on a seasonal basis.

Housing

Rural Alaska is plagued by substandard housing conditions. Many units - hastily constructed during the state's oil boom of the 1970's - have not performed well in the Arctic environment, and are prematurely reaching the end of their useful economic life, with little potential for rehabilitation. Rural Alaska's population growth and continued deterioration of marginal homes makes new housing development in rural Alaska a critical need. Future development, however, is challenged with high construction costs and absence of cash economies. (Alaska Housing Finance Corporation 1995)

Comparison of 1997 Housing Construction Costs in Alaska by City



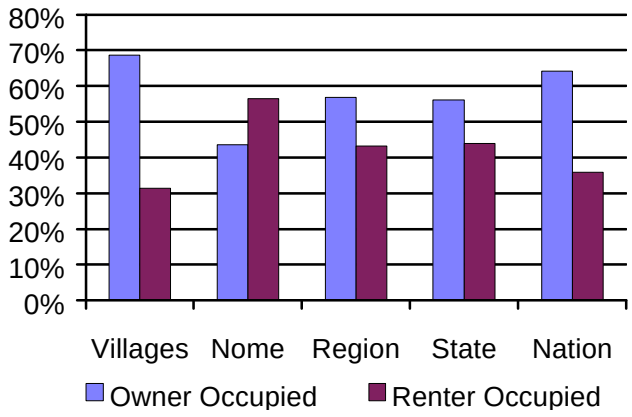
Source: AK DOL

In April 1995, the Alaska Department of Labor conducted a survey to measure the cost of acquiring building materials necessary to construct a single-family residence at various locations in Alaska. The construction materials priced represent approximately 30 percent of the total dollar value of a materials list for constructing a model single-family residence. The cost of housing in Alaska is directly affected by transportation costs (AHFC 1995). Expenses for construction materials at eight Alaskan locations revealed rural sites tended to have the highest costs (AKDOL Research & Analysis Section 1997). An updated study conducted in 1997 reveals that Alaska's regional hubs such as Nome, Barrow, and Bethel continue to have the highest construction expenses

than larger communities in the state. The lowest costs were found in southeast and south central Alaska.

Significant factors contributing to high construction cost in rural areas include few suppliers in rural Alaska, and high freight costs. Other contributors include the presence of permafrost, cold temperatures, and alternative plumbing systems. Of the total 2,371 occupied housing units in Bering Straits Region in 1990, almost 57% of these homes were owner-occupied, a percentage nearly equal to the state average (56%), but 7% less than the national average of 64% (NCES & MESA 1990). In 1990, homeownership rates for the state of Alaska ranked 46th in the nation (1st being the highest) (US Bureau of the Census 1990). The lack of competition among suppliers and low economies of scale nearly double the cost of construction materials in rural Alaska.

Type of Housing Occupant by Area in 1990



Data Source: "School District Data Profiles," USDOE National Center for Educational Statistics, and The MESA Group

Due to limited housing stock throughout the area, housing density levels in the Bering Strait Region exceed both state and national levels. These relatively high levels can be attributed to a greater number of children born per household, customary residence with extended family members, and most importantly, high costs associated with purchasing and shipping construction materials. Possibilities to increase home ownership rates could occur by making home ownership more affordable through low-interest loans and tax incentives. Increasing housing stock throughout the Region would also provide subsequent opportunities for businesses to locate in the Region.

Water and Sewer Systems

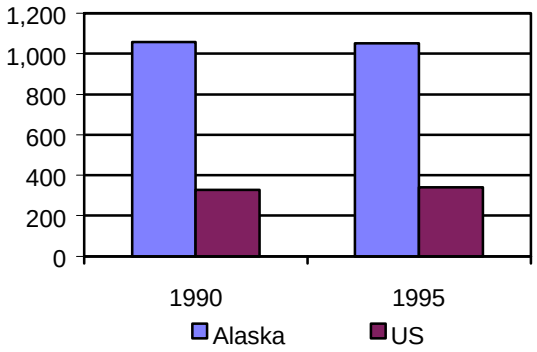
Alaska's rural communities often lack the most basic forms of public infrastructure, including piped water and indoor plumbing. (AHFC 1995) Many of the homes in Nome's surrounding villages do not have running water or plumbing. Of the 2,371 occupied housing units in the Norton Sound region in 1990, 86% (2,039) lacked complete plumbing facilities (US Census Bureau 1990). Many people in the Bering Strait Region rely on public washeterias as the main source for washing and drinking water, and use honeybuckets to dispose of human waste. Some washeterias are located in small, dilapidated buildings, and have inefficient or damaged equipment. Because funding and technical expertise are often unavailable for regular maintenance and repairs on existing equipment, some communities resort to purchasing used washers and dryers to replace damaged ones. Often times, however, broken or inoperable equipment is never replaced or fixed.

Although hauling water is second nature to many rural residents, it is an inconvenient and cumbersome process, increases the risk of water contamination, and contributes to unhealthy living conditions. Although Alaska Governor Tony Knowles declared an initiative to "put the honeybucket in the museum," (Ulmer 1995) the installation of sewer and water has been slow throughout rural Alaska.

Energy

In 1990, Alaska ranked number 1 in the nation for energy consumption per capita with 1,058 million BTUs compared to the national average of 326 million BTUs. Primary heating sources were fuel oil and kerosene for 2,054 homes, wood for 255 homes, and electricity for 30 housing units. Other sources include bottled, tank, or LP gas; and coal or coke. Such a high consumption level is attributed to the state's relatively dark and cold winter seasons. Fuel is usually barged into most villages and stored in large tanks. Because fuel capacity is a factor, a high quality of construction is needed to ensure the safety and longevity of the storage units. Constructing and maintaining large and safe bulk fuel tanks is very expensive, and many of tanks are in need of repair or replacement to due age, weathering, or damaged parts.

Alaska's Energy Consumption Per Person (in million BTUs)



Source: US Census Bureau

Telecommunications Technology

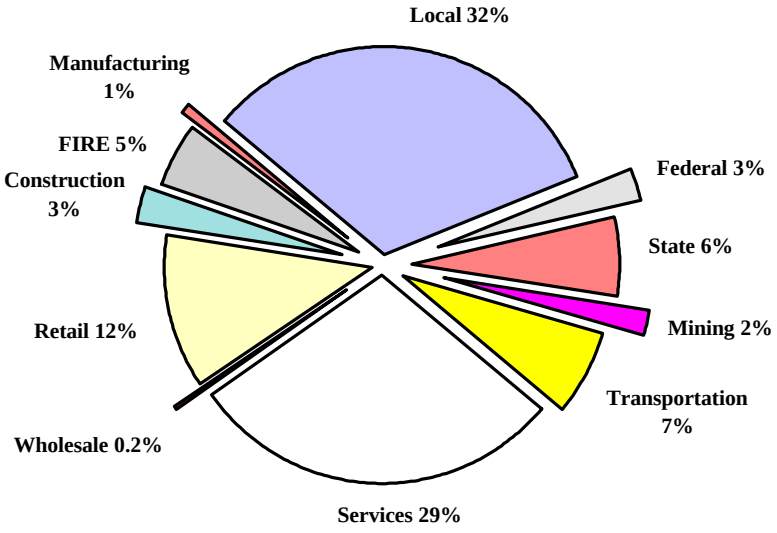
The installation of telecommunication infrastructure in the Bering Strait Region has historically lagged behind the rest of the United States. It wasn't until the early '70's when local telephone services appeared in the Region's villages. Satellite earth stations were introduced to the Region in 1976, and by 1989, digital services via satellite made their public debut at Nome's Northwest College Campus. Initial connections at the Northwest Campus operated at 9.6 baud rates, speeds well below Lower 48 standards. Since then, few enhancements were made to the Region's telecommunications infrastructure. Aging satellite operating systems, analogue switching facilities and microwave links (all of which are designed primarily for voice, not data applications) formed the basis of infrastructure in bush (rural) Alaska (Bohn 1997). For the Bering Strait Region, this meant an ongoing technological lapse from the rapidly developing information systems, data transfer and communication technologies elsewhere in America. By 1995, however, increased rural competition led to the installation of earth stations throughout the Region and a T-1 frame relay circuit in Nome. Local access to the Internet, however, is only available in Nome.

The Region's Economy

1995 Employment and Growth

In 1995, 39% (1,354) of all employees in the Nome Census Area worked for city, state or federal government. The services and retail industries were the largest private employers in the Region, each with 28% and 11% of the total workforce. Private industries with the smallest share of employment included wholesale trade (0.2%), manufacturing (1%), mining (2%), and construction (3%).

1995 Regional Employment by Industry



Source: Alaska Department of Labor

With the exception of federal and state government and the mining industry, all divisions in the Bering Strait Region experienced an increase in employment between 1990 and 1995. Three hundred and eighty five new positions were established in the Bering Strait Region, an increase of 13%. The largest relative increase in employment occurred in the service (36% increase), construction (65%) and FIRE (98%) industries. In absolute terms, the service industry accounted for more than half of the Region's job growth, while the smallest absolute increase in employment occurred in agriculture (9 positions). From 1985-1995, manufacturing experienced the greatest employment growth (750%) because this industry was essentially non-existent in 1985. Similarly, employment in wholesale trade did not exist in 1985 or in 1990; it is also a relatively new industry to the area.

1990-1995 Change in Employment by Industry

Industry	1995 Employment	1990 Employment	Change in Employees	Percentage Change r
TOTAL	3,424	3,040	385	13%
Agriculture, Forestry, & Fishing [a]	143	134	9	7%
Mining	65	163	-98	-60%
Construction	88	53	35	65%
Manufacturing [b]	34	1985: 4	31	750%
Transportation & Public Utilities	217	186	31	17%
Wholesale Trade	8	-	-	-
Retail Trade	393	376	17	4%
FIRE	165	83	82	98%
Services	957	704	253	36%
Federal Government	85	98	-13	-13%
State Government	200	234	-34	-15%
Local Government	1,069	995	74	7%

Data Source: Alaska Department of Labor (AKDOL)

[a] Agriculture, Forestry & Fishing Data from US Bureau of Economic Analysis (US BEA)

[b] Changes in Manufacturing employment from 1985-1995

Basic Employment & Earnings

Earnings for industries related to tourism, manufacturing, mining, agriculture and federal and state government are determined by conditions outside the local economy, and are known as basic industries. Businesses in industries such as retail and wholesale trade, and some transportation businesses only serve local markets and are designated as non-basic industries (Klostermann 1990).

1995 Basic Employment & Earnings Data for the Bering Strait Region

SIC	1995 Industry	Regional Employment	Basic Employment	Basic Earnings
A	AGRICULTURE, FORESTRY & FISHING [a]	143	143	$ 422,000
B	MINING [a]	101	101	$ 4,513,000
D	MANUFACTURING	34	34	$ 625,877
45	Transportation by Air	145	53	$ 1,727,821
47	Transportation Services	3	3	N/A
53	General Merchandise Stores	200	104	$ 1,460,308
58	Eating & Drinking Places	108	108	$ 1,528,720
70	Hotels & Other Lodging Places	54	54	$ 694,464
79	Amusement & Recreation Services	68	68	$ 226,746
	Federal Government	85	85	$ 3,203,002
	State Government	200	200	$ 11,123,155
	TOTAL	3,424	953	$ 25,525,093
	PERCENT BASIC EMPLOYMENT		27.8%	

Data Source: AK DOL

[a] Employment & Earnings Data from US BEA

In 1995, the state government had the largest number of basic employees (200) with approximately $11 million in annual earnings. Most of the Region's basic earnings are based on natural resource development and businesses related to tourism. The Region's mining industry was a significant contributor of basic earnings to the economy; 101 mining employees earned a total of

$4.5 million in 1995. Even though the largest basic employment in a *private* industry occurred in agriculture, forestry & fishing (143 employees), its annual earnings was only $422,000, a relatively low amount compared to other industries. Other major private contributors to the regional economy were air transportation services, merchandise stores and restaurants, each employing at least 50 employees and earning at least $1.4 million annually. Natural resources accessed or developed by regional industries includes Alaska Native arts and crafts, rare migratory birds, salmon and crab fisheries, reindeer, and minerals.

Major Employers in the Region's Economy

Major employers in 1997 were the Bering Strait School District and Norton Sound Health Corporation, both with at least 400 employees. Organizations with 100 or more employees in the Region included Kawerak and Nome Public Schools. Of the 26 largest employers in the area, 16 entities operated their organizations with government funds, which reflects the Region's economic dependence on government employment.

1997 Employers with 25 or More Employees in the Nome Census Area

Rank	*Employer*	*Business Location*	*Number of Employees*	*Rank*	*Employer*	*Business Location*	*Number of Employees*
1	Bering Strait School Dist.	Unalakleet	473	14	MJW Inc. (BOT Saloon)	Nome	41
2	Norton Sound Health Corp.	Nome	412	15	Olson Air Service Inc.	Nome	39
3	Kawerak Inc.	Nome	156	16	Shishmaref IRA	Shishmaref	39
4	Nome Public Schools	Nome	125	17	Bering Air Inc.	Nome	37
5	Alaska Gold Co.	Nome	68	18	Cape Smythe Air Service Inc.	Nome	34
6	Ryan Air Service	Nome	63	19	City of Teller	Teller	30
7	Stebbins City Council	Stebbins	55	20	Gambell Common Council	Gambell	27
8	City of Nome	Nome	51	21	Nome Nugget Inn	Nome	27
9	BSRHA	Nome	45	22	UAF NWC	Nome	27
10	Nome Joint Utilities	Nome	45	23	Golovin Fire Dept.	Golovin	26
11	Alaska Commercial Co.	Nome	44	24	City of Brevig Mission	Brevig	25
12	AK Dept. of Corrections	Nome	42	25	City of St. Michael	St. Michael	25
13	Alaska DOT	Nome	41	26	Alaska Airlines Inc.	Nome	25

Note: Firms with identical employment ranked by unrounded employment.
Source: Alaska Department of Labor, Research and Analysis Section.

Natural Resources

Migratory Birds & Birding

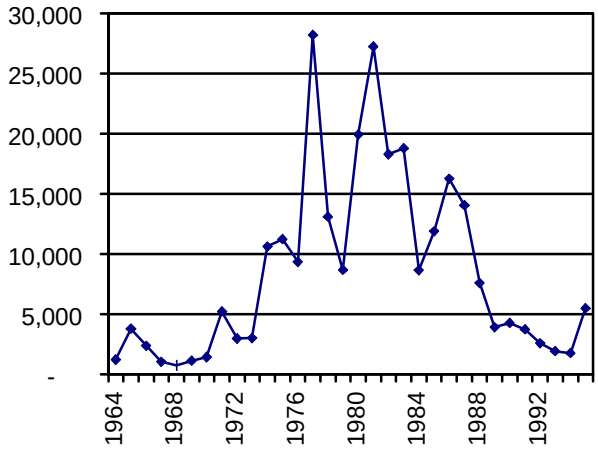
The Bering Strait Region is home to a variety of rare migratory birds. Ducks, geese, swans and cranes reside in fresh water habitats, while seabirds such as eiders, murres and auklets concentrate in great numbers along the coastline. The entire world population of Spectacled eiders spends the winter in a small portion of the Bering Strait between St. Lawrence and St. Matthew Islands, while most of the world's population of 150,000 to 200,000 Stellar's eiders migrate over the Bering Sea (Balogh 1997). Because the Region is home to a number of rare birds such as these, the Region area is a popular location among birdwatchers.

Pacific Salmon

Five species of Pacific salmon indigenous to the Norton Sound area are pink (popularly known as humpy), sockeye (red), chum (dog), coho (silver) and chinook (king). Chum and pink salmon are historically the most abundant in the Region, while only a limited number of sockeye spawn in the Seward Peninsula (Bue 1996). While commercial fishing activities traditionally account for most of the salmon harvest and is a significant source of income for commercial fishermen, it is also a primary food staple for most regional residents.

The Norton Sound area is considered one of eight major salt-water fisheries in Alaska (Alaska Department of Commerce and Economic Development 1996). Salmon management in this fishery has changed within the past few years due to poor market conditions and decreased salmon returns. Salmon populations have been so low that some years required closure or severe restrictions on fishing activities. For instance, Nome area waters were closed in 1995 for nearly the entire chum run to sport and commercial fishing, while subsistence fisheries required intense management on a stream-by-stream basis. (Bue 1996)

Chum Salmon Harvests in the Nome Subdistrict have Declined



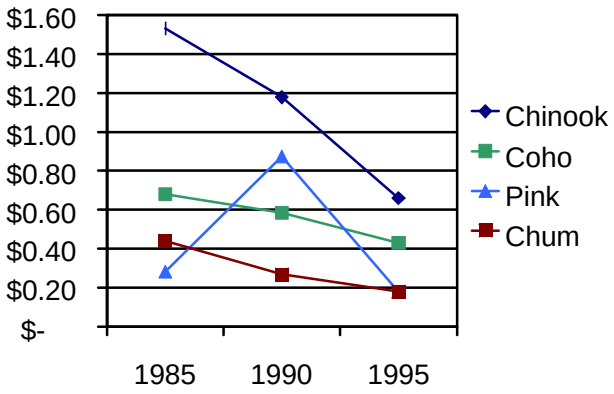
Source: Alaska Department of Fish and Game

In 1995, only 5,466 chum salmon were harvested in the Nome subdistrict. Although this is nearly 2,000 more than the 1991 harvest (3,715), the 1995 harvest was approximately 8,600 less than the total chum salmon harvest in 1987. (14,040) (Ibid.)

Two important problems facing Alaska salmon are interceptions and incidental catch in other fisheries, and the degradation of spawning and rearing habitats. (National Marine Fisheries Service) Salmon are known to migrate in large schools with one another, and this prevents the exclusive harvest of a single species. Sockeye and pink salmon are the most harvested species in Alaska, and a significant number of chum salmon are incidentally taken. In 1991, 32,000 chum salmon were estimated in the Bering Sea bycatch, and about 12,000 chum in the Gulf of Alaska bycatch. (Ibid.) Despite time-area closures and bycatch limits, commercial statewide harvest levels for pinks, sockeye and chum salmon have increased in the past decade, increasing both the direct and indirect catch of chum. Because salmon are a highly mobile source, chum salmon harvested elsewhere in the state could negatively effect their return to the Norton Sound area.

Market conditions have also restricted regional commercial harvest activities. (Ibid.) The price of salmon is now driven largely by a cheaper, worldwide supply of farmed fish originating outside of Alaska, resulting in lower prices for wild salmon. (AKDF&G 1995b). In 1996, open commercial fishing periods did not occur in Norton Bay (waters between Koyuk and Shaktoolik) due to low market demand. This was the 6th time since 1985 that no landings were made in Norton Bay; the last significant commercial harvest in the area occurred in 1988 (Bue 1996).

Salmon Prices Have Declined in the Norton Sound District



Source: Alaska Department of Fish & Game

Similarly, recent commercial harvest levels in the Shaktoolik and Unalakleet areas (located in the southern half of the Region) are below average due to low market prices. Due to low market demand, only 105 out of 172 commercial fishing licenses were used in 1995, a record low for the Norton Sound area. (Ibid.)

Other Potential Fisheries

Although salmon stocks throughout the Region are depressed, the potential to develop other seafood resources in the Bering Strait Region exists. The Bering Strait Region's fish stocks include halibut, herring, crab, shrimp, northern pike, bourbot, white fish, grayling, and various salt water cods and fresh water trout. Found throughout the Norton Sound, the Green Sea Urchin is considered one of the most valuable species in the seafood market, and is entirely undeveloped in this Region. Previous surveys indicate that as much as 9,500 tons of this species exists in the Bering Sea. Similarly, with an apparent biomass of 52,000 tons, the Saffron cod is the most abundant species in the Norton Sound waters. The highest concentrations of this species are located between Cape Nome, the mouth of the Yukon River, and Southeast Cape on St. Lawrence Island. Possible export markets for both products include northern Japan and Korea. (Ohyama, publication date unknown)

Alaska King Crab

Red king crab is the only shellfish harvested in the Norton Sound. Blue king crab and Tanner crab exist in these waters, but are seldom caught by commercial or subsistence fishermen. While local residents have utilized Red king crabs for subsistence purposes for many years, the commercial fishery was not initiated until April 1977. In 1991, a National Marine Fisheries Service

survey found 3.4 million pounds of legal king crab in the commercial fishing district. By 1996, the Alaska Department of Fish and Game conducted a trawl survey and found that the legal biomass declined by 60%. (Lean and Brennan 1997) Results from the trawl survey prompted fishery managers to reduce the 1997 harvest rate to 80,000 pounds, a significant reduction from the previous year (340,000 pounds). (Ibid.)

In the summer of 1997, 15 permit holders on 13 catch vessels made 100 landings during the summer commercial red king crab fishery. Approximately thirty two thousand crab were caught - totaling at 92,988 pounds - the smallest commercial harvest since 1993. With ex-vessel prices at $1.98 per pound, the estimated value of the 1997 fishery was $184,166. (Ibid.) Meanwhile, the winter fishery begins November 15 and ends May 15; typically occurs near Nome; and is required to take place on ice, not from vessels. Unstable ice conditions east of Nome and poor catch rates have resulted in some of the lowest harvest levels in recent years. In 1997, ice conditions were generally unfavorable throughout Norton Sound. Because the volume of crab has been so low, no processor has found it profitable to operate locally. As a result, no crab were sold out of town. The 1996-1997 winter catch of 210 pounds was estimated to be worth about $598. (Ibid.)

As with commercial season, the 1996-1997 subsistence harvest for Alaska Red king crabs was beset with poor ice conditions. Frequent storms limited the extent of the shore fast ice and fishers had difficulty keeping their pots and finding suitable locations. Of the 18 permits returned, 10 permit holders reported harvested crab. Permit data indicated that the subsistence harvest consisted of 697 male crab and 9 female crab, a decline of 83% from the 1994-1995 subsistence harvest, and a 58% decline from the 1995-1996 season. (Ibid.)

Reindeer

Commercial whaling, walrus hunting, decreasing caribou herds, and epidemics during the late 1800's threatened the survival of Alaska Natives in the Bering Strait Region. Sheldon Jackson, General Agent of Education, believed reindeer would provide a stable and reliable food supply for Alaskan Natives, and facilitate their conversion to Christianity and acculturation into Euro-American society. In 1892, reindeer were transported to the Seward Peninsula from Siberia. The Teller Reindeer Station (presently known as Teller, Alaska) was constructed and became the primary headquarters for training Alaska Natives in herding techniques. By 1895, Alaskan Native apprentices were trained, and began owning herds (Reindeer Herders Association, publication date unknown).

Since their introduction, reindeer herding has played an important part in the Region's economy by fulfilling the demand for reindeer products and by providing local employment. With herds existing near Shaktoolik, Stebbins, Teller, Nome, and on St. Lawrence Island, the entire Bering Sea Region serves as range to 62% (25,000) of the state's 40,000 reindeer (University of Alaska Fairbanks Reindeer Research Program). To ensure the success of reindeer herds in the Region, Kawerak's Reindeer Herders Association (RHA) comprises of 18 private herd owners and three tribal councils. The Association aims to enhance the economic base of rural Alaska by facilitating the efficient production, distribution and marketing of reindeer products, and by improving herd management (Reindeer Herders Association, publication date unknown).

Gold

Following the discovery of gold at Anvil Creek in 1898, (approximately 2 miles east of Nome) 10,000 miners hoping to strike it rich arrived into the Nome River area by 1899. Once the "golden sands of Nome" were discovered west of Anvil Creek, miners with shovels, buckets and wheelbarrels extracted $1 million dollars worth in gold (at $16 per ounce) within 2 months (Bell's Mile By Mile 1997). Since the first strike on Anvil Creek, mining efforts in the Nome area have yielded over 6.8 million ounces of gold (20% of the State's total production) at a total of $136 million.

Today, the Nome District contains over 17,000 acres of patented mining claims, and is home to Alaska's largest producer of placer gold, Alaska Gold Company. (Sparks 1998) While the Alaska Gold Company has proven probable reserves within Nome's buried beach line deposits, its future is in jeopardy as the price of gold remains low. In January 1998, *The Nome Nugget* newspaper reported that the Alaska Gold Company was facing prices below operational costs ($276 per ounce), and would not operate this season if gold prices did not increase to at least $340 per ounce. By February, gold prices only increased to $292 per ounce, and Alaska Gold Company announced it would close operations on December 26, 1998 (Medearis 02/26/98). Sixty-five mining employees began losing their high paying jobs this spring, and this decline will have a significant impact on the Region's economy.

Once gold prices rise, the future of prospective mining and development lies in submerged beaches, low grade tailings, ancient stream channels, and most importantly, the lode source of placer gold. Modern exploration to find the source of the placer gold from the Nome and Council/Solomon Mining Districts recently began. Several advanced lode gold prospects have proven probable reserves in the one half to one million-ounce category based upon data generated to date. (Sparks 1998) Meanwhile, the offshore placer gold potential near Nome remains the last untapped placer gold source. From 1985-1990, the BIMA dredge - the largest bucket line dredge in the world – recovered more than 121,000 ounces of gold off of Nome's coast. Because this amount was recovered from less than two percent of the company's lease holdings, renewed interest in this deposit may rekindle future development. In addition to the search for hard rock gold targets, base metals have also been re-explored in recent years. This prospecting has defined large massive sulfide deposits, containing lead, zinc, silver, barium and fluorine in layered iron deposits. (Ibid.)

Tin

Over four million pounds of tin, in both placer and lode forms have been mined on the Seward Peninsula. Known tin deposits exist at Cape Mountain, Potato Mountain, Brooks Mountain, Lost River, Black Mountain, Ear Mountain, Kougarok Mountain, and at the Oonatut Granite Complex. The Potato Mountain prospect is considered an outstanding tin prospect because the tin enriched granite underneath Potato Mountain is intact. Modern exploration techniques, including expanded airborne geophysical surveying hold the key for understanding the complex geology of the Seward Peninsula. An expanded base of geologic information may yet yield a large hard rock gold mine on the Seward Peninsula. (Ibid.)

Tourism

In addition to natural resources such as minerals and fisheries, tourism is a significant contributor to the Region's economy. Known for its gold rush history, Nome lures many visitors to the area and is an established rural destination. Approximately 20-23,000 people travel from outside the Region to Nome each year – nearly 3% of Alaska's 836,900 visitors in 1993 (Nome Convention and Visitors Bureau). Forty-six percent of these individuals are packaged tourists who travel with major airlines, and 17% are independent travelers. Eighty-four percent (19,300) traveled to Nome for vacation and pleasure; 11% came to Nome for business and pleasure; and nearly 6% came for business purposes only. Most of Nome's visitors spend less than one night in town, while the average time spent in Alaska is 13 days. Due to the limited amount of time spent in the area, Nome's visitors spent a total of $2.3 million in 1993, an amount that only constitutes 0.4% of the $598 million spent in the entire state (Nome Convention and Visitors Bureau). Nevertheless, on a scale of 1-7 with one being poor and seven being excellent, visitors gave Nome a 5.7 for their stay. To generate additional revenue for the Region, Nome should take full advantage of its name recognition, history and other unique attributes to expand its tourist-related services. The greatest barriers to increasing tourism in the Region are high travel costs and Nome's distance from Alaska's larger cities. By expanding and promoting the diversity and quality of its annual activities, and by improving its accommodations and services, increased competition would subsequently reduce transportation costs.

Cultural tourism and eco-tourism have interested some villages in promoting their community as a visitor destination. While generating additional revenue for their area, demonstrating cultural traditions and sharing natural resources would help these communities preserve their heritage for future generations. Villages such as Gambell and Wales have already established tourism in their villages, and expanding tourist activities elsewhere would be best accomplished by promoting Nome as a tour destination from which day trips to nearby villages could be marketed or facilitated.

Identifying Regional Priorities

Traditional Native Values Used to Guide the Planning Process

Respect Elders
Respect Others
Respect Nature
Maintain Family Kinship and Roles
Share with Others
Know your Native Language
Cooperate with Others
Love and Respect One Another
Use Humor
Exercise Hunting Traditions
Be Compassionate
Be Humble
Avoid Conflict
Maintain Spirituality

Approximately two-thirds of the region's population is Alaskan Native with ancestral ties to the Region. The traditional values of Alaska Natives tie people together and encompass a way of life that is passed to future generations. The values embody a way of life that is critical to the development of one's self-image, the cohesion of social organization, and vital to the socioeconomic well being of our residents. As a result, these values were essential to the creation of the Overall

Economic Development Plan. These cultural values were taken from elder Paul Tiulana, an "Inupiaq Values" poster published by the North Slope Arctic Borough, and amended by the Bering Strait ARDOR Committee.

Organizing & Facilitating Local Participation

In order to garner as much local involvement as possible, representatives from Kawerak and the Alaska Department of Community and Regional Affairs (DCRA) facilitated community-led rural economic development workshops in 13 communities throughout the Region. During the planning process, Kawerak's CED staff established a working relationship with Tribal Coordinators two months prior to each meeting. During that time, Tribal Coordinators distributed flyers throughout their community, and invited tribal council, city council, and native corporation representatives to participate in the event. Elected officials from each community were specifically contacted to ensure local participation throughout the process; to promote cooperation among governing entities when creating strategies; and to secure their involvement when implementing the Overall Economic Development Plan. Although an outline was created for these workshops, it was flexible enough to reflect the interest and needs of each community. Objectivity was also maintained at each workshop because facilitators refrained from offering their personal opinions and only recorded participant input. The use of an adaptable schedule, maintaining objectivity and encouraging feedback throughout the entire process were used to ensure the final report reflected the actual needs of the Region.

Each workshop began with the distribution of workshop packets and introductions; a description of the Overall Economic Development Plan, the Bering Strait ARDOR Committee, and Kawerak's CED program activities; followed by the purpose of the community workshop. Worksheets were given to each participant with instructions to identify the community's most critical economic issues. Once completed, every participant voiced his or her concerns by reviewing his or her list with the other participants, and their thoughts were written on a flip chart. Participants were then asked to approach the flip chart to identify the top three economic issues/concerns in their community. While priorities were tallied, workshop participants determined as many local strengths, weaknesses, opportunities, and threats (SWOTs) as possible.

What is SWOT?

SWOT identifies community strengths, weaknesses, opportunities, and threats brought about through economic and social change. Strengths and weaknesses identify current issues, while opportunities and threats focus on those in the future. Strengths represent positive activities in the community, and are the foundation for community and economic development. Weaknesses on the other hand, are challenges the community needs overcome, and paves the way toward improvement. Identifying opportunities offers a chance to brainstorm on activities that will benefit their community, and to determine benchmarks for future development. And finally, identifying threats helps community and economic developers prevent or reduce the negative impacts of continued economic and social change. Discussing community values and concerns provides the opportunity to expand an individual's perspective to ideas never considered before. While one individual may identify an issue as a strength or opportunity, another may perceive the same issue as a weakness or

threat. When clarifying these differences is conducted in a positive manner, the process can be a healthy experience for a community and spark the potential for growth.

Analysis of our Regional Strengths, Weaknesses, Opportunities and Threats

The organization of SWOT lists and regional priorities are based seven economic foundations developed by the Committee for Economic Development, an independent research and educational organization of over two hundred business executives and educators. The CED believes the important role for state and local governments is to invest in economic foundations that enable the economy to grow, adapt and compete. These foundations include a capable and motivated workforce; sound physical infrastructure; well-managed natural resources; knowledge and technology; enterprise development; an attractive quality of life; and fiscal management. (Committee for Economic Development 1986) Additional categories included in our analysis to reflect the needs of our communities include geography and climate, and community capacity. Basing our analysis on this framework enable us to determine how we should spend our limited resources in the most cost-effective manner.

A compilation of community SWOT lists reveals that the greatest strengths of a community emphasized geographic surroundings, natural resources, the people and their traditions, as well as access to basic infrastructure. Some of the strengths were a subsistence way of life, the existence of many airline companies, and strong leadership. While other communities throughout the rest of the United States would emphasize characteristics that facilitate a sense of community, it is more than likely that they would not recognize the importance of access to plumbing and roads. Because road transportation and water and sewer are not available throughout most of the region, communities that do have these basic services feel fortunate. Meanwhile, quality of life, workforce issues, business development and governance issues were considered as regional weaknesses. The most common weaknesses emphasized loss of native language and culture, few youth activities, and lack of community activism. Other concerns included low educational attainment and training, unemployment, and substance abuse.

Opportunities for improvement in the Norton Sound area focused on quality of life, infrastructure development and private business development. To improve the well being of the Region, the most common recommendations were to develop culture centers; expand tourism; finish water and sewer projects; and conserve and develop fisheries. Despite concerns regarding the Region's workforce, few suggestions to improve this area were made. Meanwhile, future threats to the area focused on governance issues, natural resources, and the workforce. These issues included insufficient government funds, depleting fish and animal stocks, and continued substance abuse.

STRENGTHS		
Quality of Life	*Natural Resources*	*Infrastructure*
Dry Community	Subsistence Way of Life	Water & Sewer
Cultural Diversity	Mineral Resources	Nice Airport
Elders	Natural Resources	Accessibility by Road
Business & Industry	*Geography & Climate*	*Community Capacity*
Many Airline Companies	Beautiful Location	Strong Leadership

WEAKNESSES

Quality of Life
- Loss of Native Culture & Language
- Few Youth Activities/Programs
- Lack of Community Involvement

Workforce
- Inadequate Education & Training
- Substance Abuse

Community Capacity
- Urban Bias in State Legislature
- Small/Decreasing Financial Base

Business & Industry
- Unemployment
- Underemployment

OPPORTUNITIES

Business & Industry
- Conserve & Develop Fisheries
- Promote/Expand Tourism
- Promote Arts & Crafts
- Develop Mineral Resources

Infrastructure
- Complete Water & Sewer Projects
- Construct New Housing

Quality of Life
- Create Culture Centers
- Preserve Language & Culture
- Increase Citizenship
- Support Native Language Program

Workforce
- Secure Grantwriter Training

THREATS

Community Capacity
- Insufficient project funds
- Politics/Territorialism

Natural Resources
- Depleting Fish & Animal Stocks

Workforce
- Substance Abuse

Analyzing our Regional Priorities

After strengths, weaknesses, opportunities and threats were identified, participants reviewed their priority list, and issues with equal ranking were clarified through group consensus. To facilitate a comfortable working environment and to maximize workshop time, participants were divided into two groups and assigned to develop strategic plans for each priority. Participants counted off by two so that an equal number of persons were in each group, and priorities were divided into odd and even categories. This division added a higher degree of fairness to the process because it allowed each group to work on high priority issues.

Enhancements to and the expansion of existing infrastructure were the highest priorities in the Region. At least eight or more communities believed water and sewer lines, housing development and improvements to school buildings were the most important projects to complete. While fishery conservation and development efforts was the highest priority concerning natural resources, increasing employment opportunities, expanding tourism, and promoting arts and crafts were the most important issues under enterprise development. The top two issues concerning workforce development were securing additional training, and increasing childcare services. And finally, recommendations to improve the quality of life throughout the Region focused on establishing teen centers and an elder care facility.

PHYSICAL INFRASTRUCTURE

Finish Sewer & Water Projects – 9
Construct & Improve Housing – 7
Improve & Create Landfills - 6
Construct & Maintain Roads - 5
Purchase & Maintain Heavy Equipment – 3
Construct & Relocate Fuel Tanks – 3
Construct & Improve Washeterias - 3
Construct Seawalls – 2
Construct Runway or Hanger – 2
Build Search & Rescue/Fire Hall – 2
Purchase Fire Equipment – 2
Implement Street Lighting – 1
Establish Hydroelectric Power – 1
Construct a Post Office – 1
Construct Small Boat Harbors – 1
Construct Shelter Cabins – 1
Protect Power Cost Equalization – 1
Construct Tribal Court Office – 1

WORKFORCE DEVELOPMENT

Improve & Build New Schools – 7
Expand & Improve Clinics – 6
Secure Job Skills Training – 5
Increase Childcare Services – 4
Reduce Substance Abuse – 3
Prepare for Welfare Reform – 2
Reduce Gambling – 1
Construct Headstart Building - 1
Increase Education Attainment – 1
Reduce Juvenile Delinquency - 1

QUALITY OF LIFE

Construct Community/Culture Centers – 4
Construct Elder Care Facility – 4
Construct/Improve Teen Centers - 3
Preserve Traditional Lifestyles – 3
Increase Police Protection – 2
Construct Holding Cell – 1
Secure Funds for Whaling Activities – 1

ENTERPRISE DEVELOPMENT

Increase Employment Opportunities – 4
Expand Tourism – 4
Reduce Cost of Living Expenses – 2
Promote Arts & Crafts Development – 2
Expand Trade with Russia – 1
Secure Funding for Walrus Carnival – 1
Construct a New Tannery Building - 1
Construct Fish Plant – 1

NATURAL RESOURCES

Conserve & Develop Fisheries – 5
Natural Resources Development – 2
Protect Subsistence – 1
Mineral Development – 1
Expand Reindeer Industry– 1
Prepare for Gold Company's Shut Down – 1

Once regional development priorities and issues were identified, the Bering Strait ARDOR Committee convened to develop the top three regional goals for each development category, as well as a strategic plan and budget for each goal.

Regional Goals & Objectives

The strategic plan will focus on developing community capacity; expediting the installation of public infrastructure; improving labor force qualifications and services; developing basic industries; sustaining our quality of life; and effectively managing our natural resources. Investments in these areas would increase economic productivity and competition, increase job opportunities and earnings among residents, and help reduce cost of living expenses. An Empowerment Zone designation for the Bering Strait Region would provide the necessary resources to:

- Expand community capacity by promoting the development of healthy families and future leaders.
- Expedite the installation of basic infrastructure such as adequate housing, water and sewer, power, landfills and roads – necessities that are often taken for granted elsewhere in the nation.
- Enhance the quality of the workforce by strengthening education and training programs, childcare services, and health care services.
- Maintain our quality of life by sharing traditional lifestyles with younger generations.
- Strengthen the region's economy through tourism development and business start up and expansion.
- Conserve and develop our natural resources in a sustainable fashion.

Community Capacity

HEALTHY FAMILIES: Healthy lifestyles among families will assist in the development of children who can contribute to the achievement of future community goals.

Objective One: Reduce the incidence of teen pregnancy.
Objective Two: Provide parenting classes in each community to ensure the development of healthy children.
Objective Three: Enhance village based counseling program to help prevent and treat child abuse, child neglect, and domestic violence.

HEALTHY INDIVIDUALS: The Region's current and future leaders will possess the initiative and capabilities to establish and successfully attain their community's goals**.**

Objective One: Facilitate the attainment positive and healthy lifestyles among the Region's youth by developing "real life" family curriculum in schools, encouraging after school activities, summer learning camps, elder and parent involvement and other activities that will create more responsible young individuals.
Objective Two: Offer leadership training to all locally elected officials and local government employees to ensure the attainment of community goals.

Infrastructure

HOUSING DEVELOPMENT: All residents in the Region will have access to adequate housing.

Objective One: Increase local fire protection in order to meet housing loan eligibility requirements.
Objective Two: Improve or renovate existing housing stock throughout the Region.
Objective Three: Orchestrate a comprehensive approach to implement housing, water, sewer and road projects.
Objective Four: Increase the availability of a qualified labor force in each community.
Objective Five: Utilize "force accounts" to ensure that local hire and local resources are utilized in housing, water, sewer and road projects.

UTILITIES: All residents will have access to basic services such as electricity, fuel, and water and sewer.

Objective One: Expedite the installation of cost-effective sewer and water systems in the Region.
Objective Two: Improve the quality of community washeterias through upgrades and regular maintenance.
Objective Three: Increase the availability of local plumbers and maintenance men throughout the Region by providing training.
Objective Four: Repair or relocate village fuel tanks, and construct new and safer tanks where necessary.

LANDFILLS: All Communities will possess adequate landfills that adhere to federal or state standards.

Objective One: Develop and upgrade landfill/sewage sites.
Objective Two: Maintain landfill/sewage sites through creating trained maintenance employees.

ROAD TRANSPORTATION & MAINTENANCE: All communities will possess well-maintained roads and streets that meet state or federal standards.

Objective One: Expand, improve and maintain local roads.
Objective Two: Provide training and equipment to individuals who will maintain needed roads.

Workforce Development

EDUCATION & TRAINING: Economic production and employment earnings will grow through educational attainment and job skills training.

Objective One: Incorporate business needs and student interests into education and training programs.
Objective Two: Adapt school facilities for the growing student population, and provide a safe environment for learning.
Objective Three: Work with higher education facilities to provide the necessary job training and education curriculum.
Objective Four: Provide Internet access to all local schools.

CHILDCARE SERVICES: To increase the productivity of single parent families, reliable and qualified childcare providers must be available to these individuals.

Objective One: Increase workforce participation by increasing the availability of certified daycare providers.
Objective Two: Offer training to childcare providers on nutrition, early childhood development, nurturing and sanitation.
Objective Three: Provide small business training to individuals who wish to start a childcare facility in their home.

SUBSTANCE ABUSE: Increase the economic productivity of the workforce and improve the quality of life in each community by decreasing the incidence of substance abuse.

Objective One: Increase the availability and quality of community based services for substance abuse prevention and treatment.
Objective Two: Encourage drug and alcohol awareness curriculum in schools as a preventative measure for the future workforce and to deal with drug and alcohol abuse in a student's life.

HEALTH CARE SERVICES: Decrease employee absenteeism through expanded health care services.

Objective One: Expand & improve community health clinics.
Objective Two: Increase opportunities for training in health related fields.
Objective Three: Expand preventive health care measures to promote healthy lifestyles.

Quality of Life

PRESERVING TRADITIONAL LIFESTYLES: Maintain traditional lifestyles and values in order to foster community wellness in the Region.

Objective One: Establish an Alaska Native education curriculum & activities.
Objective Two: Construct community culture centers.
Objective Three: Assist tribes in Repatriation efforts.

ELDER SERVICES: Increase elder health and longevity through the expansion of elder services in their respective communities.

Objective One: Expand health care service and housing for the Region's elders.

Business Development

TOURISM DEVELOPMENT: Strengthen the Region's economy through tourism development.

Objective One: Expand tourism activities throughout the Region.
Objective Two: Expand bird watching and Eco-tourism in areas were such ventures are feasible.
Objective Three: Encourage the construction of a multi function facility, which offers cultural information, performing arts, visitor information, museum space and other types of interpretive and educational information.

BUSINESS START UP & EXPANSION: Increase regional employment and income per capita through small business start up and expansion.

Objective One: Provide the Bering Strait Inuit Cooperative with the opportunity to access financial capital.
Objective Two: Expand the Shishmaref Tannery.
Objective Three: Assist in establishing value-added products for the Reindeer Herders Association.
Objective Four: Increase business efficiency through business management training.
Objective Five: Diversify the region's economy by developing a market for native berries.
Objective Six: Establish a Revolving Loan Fund if economically feasible.
Objective Seven: Encourage the use of the Internet and other new technologies to promote business development.

To assist in the development and expansion of small businesses throughout the Region, Kawerak's Community and Economic Development employs a full-time Economic Development Specialist to implement the following responsibilities:

- Identify and assess business development opportunities.
- Assist in the development of business plans.
- Identify and disseminate information about available business development resources.
- Expand & maintain a library on business start up and management.

Natural Resources

FISH & WILDLIFE: Effectively manage subsistence resources to sustain the Region's traditional economy.

Objective One: Develop a subsistence management plan for the region.
Objective Two: Enhance and sustain fishing stocks to historical levels while developing value-added products in the fishing industry.
Objective Three: Identify and develop industries to tap undeveloped resources in commercial quantities in the Region.

MINERALS: Increase employment and earnings through mineral development.

Objective One: Increase mining exploration and extraction activities by reducing Coastal Zone Review restrictions.

Objective Two: Encourage state, federal and private enterprise to update geophysical and geological maps in the region to explore new mining potential.

What's Next?

The Bering Strait Overall Economic Development Plan will be distributed throughout the Region. All IRA Councils, Local and Regional Native Corporations, City Councils, Village Libraries, and other interested persons will receive the OEDP, and is anticipated to guide their development efforts. Kawerak, Inc. will use its existing programs and resources to assist in the implementation of a comprehensive regional economic development plan. The Bering Strait ARDOR Committee will assist local, tribal, state, federal agencies and private organizations in implementing the plan, and will update the document on a regular basis. The project will impact all communities within the Region by decreasing unemployment and poverty, and by improving the overall quality of life.

As the lead entity, Kawerak will strive to increase the quality of its services to the residents of the Bering Strait Region. To ensure the success of each program, both the participants and coordinator must undertake a cooperative effort to achieve the desired outcome. In cooperation with other entities in the region, each program or activity will begin by asking participants to identify their interest and anticipated outcomes in the program. To ensure each objective achieves its goal, regular feedback will be obtained from persons who are directly impacted by a project or service. Seeking feedback from each participant will also induce participants to evaluate their own progress, a self-monitoring behavior that has a direct impact on their self-esteem. As participants reflect on their improvements and recognize the attainment of short-term goals, self-efficacy develops and the likelihood of achieving more complicated, long-term goals increases.

The implementation of the strategic plan will not be successful unless direct input is sought from the Region's residents. While detailed action plans will be finalized in conjunction with other regional organizations, program activities and outcomes will be derived from the participants at the local level. Seeking and incorporating the interests of program participants will also occur in nearly all areas of the strategic plan. For instance, the development of healthy individuals by incorporating independent living skills into school curriculums will only succeed if the interest of the students – those who are directly affected by the program – are incorporated into the plan. It is the intention of Kawerak's Community and Economic Development office to ensure the needs and interests of the participants is directly incorporated into these programs and services.

Time will be taken throughout the implementation so that the participants, coordinator, and concerned citizen have the opportunity to see what achievements are made. At the end of each task, either written or verbal communication will be used with participants to identify areas that should receive greater emphasis, additional topics to include, and suggest how instructors can improve their program. Suggestions and recommendations will then be incorporated to ensure our services best meet the needs of our participants. Progress reports will also be shared with the Bering Strait ARDOR Committee in order to receive guidance and recommendations.

Appendix A

Schedule of Community-Led Economic Development Workshops

Community	Date	Time	Location	Facilitators	Complete?	Remaining
Brevig Mission	Tuesday, January 6, 1998	7:30 pm-11:30 p.m.	Community Hall	Karlin & Chuck	Partial	SWOT
Teller & Mary's Igloo	Thursday, January 8, 1998	1:00 pm-5:30 p.m.	Bingo Hall	Karlin & Chuck	Yes	
Stebbins	Monday, January 12, 1998	7:30 pm-11:15 p.m.	IRA Office	Karlin & Chuck	Yes	
St. Michael	Tuesday, January 13, 1998	7:30 pm-11:30 p.m.	City Office	Karlin & Chuck	Yes	
Shaktoolik	Thursday, January 22, 1998	1:00 pm-5:30 p.m.	Teen Center	Karlin & Chuck	Yes	
Wales	Monday, January 26, 1998	7:30 pm-11:15 p.m.	Dome Building	Karlin & Chuck	Yes	
Shishmaref	Thursday, January 29, 1998	1:00 pm-5:00 p.m.	Community Hall	Karlin & Chuck	Partial	SWOT & Objective Plans
Gambell	Wednesday, February 4, 1998	1:00 pm-3:30 p.m.	IRA Office	Karlin & Chuck	Yes	
Elim	Friday, February 6, 1998	1:00 p.m.- 5:00 p.m.	Old Church	Karlin & Chuck	Partial	Objective Plans
Golovin	Wednesday, February 11, 1998	1:00 p.m.- 5:30 p.m.	Bingo Hall	Karlin, Chuck, Carol	Yes	
Savoonga	Tuesday, February 17, 1998	"No Show"	IRA Office	Karlin, Chuck, Carol	No	Entire Workshop
Koyuk	Thursday, February 19, 1998	1:30 p.m.- 6:00 p.m.	Bingo Hall	Karlin, Cullen, Carol	Yes	
Solomon	Saturday, February 21, 1998	1:00 p.m.- 5:00 p.m.	NEC Bldg.	Neal & Jaylene	Yes	
Council	Saturday, February 21, 1998	1:00 p.m.- 5:00 p.m.	NEC Bldg.	Hannah & Cullen	Yes	
King Island	Saturday, February 21, 1998	1:00 p.m.- 4:30 p.m.	NEC Bldg.	Karlin & Chuck	Partial	Prioritize Issues
Nome	Friday, March 27, 1998	1:00 pm-5:15 p.m.	Old Church	Karlin & Chuck	Partial	Objective Plans
Diomede						Entire Workshop
Unalakleet		"No Show"				Entire Workshop
White Mountain						Entire Workshop

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